

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A process for removal of SO₂ in off-gases having a temperature of ~~30-150° C~~ 50-120° C and containing ~~0.001-1~~ 0.001-0.1 vol % SO₂, comprising the steps of:

oxidizing the SO₂ to H₂SO₄ without the use of an absorption tower by spraying an aqueous solution of H₂O₂ into the off-gas upstream of an aerosol filter to form H₂SO₄ by reaction in the gas phase between SO₂ and H₂O₂; and

removing the produced sulphuric acid from the off-gas in the aerosol filter.

2. (Original) A process as in claim 1, in which the off-gas is cooled by evaporation of the water comprised in the solution being sprayed into the off-gas upstream of the filter.

3. (Previously presented) A process as in claim 1, in which a wet electrostatic separator is used in place of an aerosol filter.

4. (Canceled)